

WEST**End of Result Set**

Generate Collection

Print

L3: Entry 7 of 7

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TITLE: Method for passively browsing the internet using images extracted from web pages

Abstract Text (1):

A technique is provided for passively browsing the Internet or an intranet by displaying images from web pages on a user's display screen. The user can select an image by clicking on it using a pointer manipulated by a mouse or trackball. A mapping list is maintained that maps the image universal resource locator (URL) for each image to the URL of the web page containing the image. Using the mapping list, the user's web browser can be driven to the web page associated with the image selected by the user. A group of web pages may be defined based on the results of a search, by entering URLs for sites or web pages of interest, using a bookmarks file, based on the currently displayed web page in a web browser, or by determining which web pages are associated with the images stored in an image cache.

Brief Summary Text (9):

The group of web pages containing the images to be displayed can be obtained in various ways. For example, a search engine can be used to locate web pages based on certain search criteria. Web page or web site URLs can be entered manually or by using a cut and paste operation from an application running in an open window. A bookmarks file containing various URLs can also be used to define a group of web pages. Web pages can be obtained based on the URL for the currently displayed page in an active web browser. A recursive retrieval process can be used to obtain multiple groups of linked web pages. Regardless of how the group of web pages is defined, the system extracts embedded image URLs from the web pages and forms a list mapping the extracted image URLs to the URLs of the web pages associated with those images.

Brief Summary Text (12):

The user can passively browse the Internet or an intranet by observing the displayed images. Web page images typically contain lively text and graphics, so it is relatively easy for users to quickly review a large amount of material. When images are obtained from an image cache or from web pages associated with the URL for a currently displayed page of an active web browser, no user input is required. When the user submits a search or a list of web page or web site URLs, only minimal user input is needed.

Detailed Description Text (4):

Various techniques can be used to define the set of images that are presented on screen 12. If desired, the images can be obtained from an image cache. The contents of the cache varies continually as other users browse the Web and draw different images into the cache. As new images are added to the cache, they are displayed on screen 12. Because a variety of images are presented to the user without any user input, the user may browse the Internet or intranet passively. Another way in which to obtain images is to perform a search for web pages that meet certain predefined search criteria. The images displayed on screen 12 can be extracted from the web pages that match the search criteria. Similarly, a user can provide a list of certain universal resource locators (URLs) to define a set of web pages or web sites. The URLs can be entered by the user manually or by cutting and pasting from an application or can be supplied from a web browser's bookmarks file. The web page images are obtained from the web pages associated with the list of URLs. Web page images can also be obtained from web pages associated with the currently displayed page of an active web browser.

Detailed Description Text (16):

If desired, the user can "send" the snapshot to a friend, by communicating the URL of the snapshot web page to the friend (e.g., by e-mail, etc.). Because the snapshot has

been installed on a web server, it may be accessed by anyone with the appropriate URL. When the accessing user clicks on a region of the snapshot image map, the user's web browser sends the coordinates of the user's selection to the web server along with the name of the image map coordinate file. The web server determines the URL of the web page associated with the selected region by searching through the image map coordinate file for the first region that contains the selected coordinates. The web server then sends back a command that drives the user's web browser to the web page associated with the image in the selected region.

Detailed Description Text (18):

Another way in which images can be displayed involves performing a search or entering web site information. In system 72, clients 74 and 76 are interconnected with web servers 78 and 80 via the Internet 82, as shown in FIG. 6. The group of web images that are displayed on clients 74 and 76 may be based on a search, a list of URLs, a bookmarks file specified by the user, or the currently displayed page of an active web browser.

Detailed Description Text (21):

If the user selects the option "search," the user is provided with an opportunity to enter various search parameters at step 92. For example, the user can enter search terms for subjects of interest. Another item that the user can enter is the desired depth of web page links to be searched. At step 94, a search engine is run to generate one or more web pages of search results. At step 96, montage application 88 extracts a list of URLs from the search results web pages generated at step 94. If desired, a filter may be used at step 96 to ensure that the extracted URLs only correspond to sites other than the site of the search engine. This type of filter excludes links to commercial entities associated with the search engine service (e.g., links to Alta Vista services or Digital Equipment Corporation when the Alta Vista search engine of Digital Equipment Corporation is being used).

Detailed Description Text (25):

In addition, the web pages that are retrieved can be filtered during process 104. For example, montage application 88 might only retain web pages from the same site as initially entered by the user to ensure that the retrieved web pages are similar in content to the initially entered search. This filter can be used in conjunction with the type of filter used at step 96 (which excludes "same site" links). For example, during the few layers of web page retrieval the filter can exclude links to sites other than for the listed URLs, thereby ensuring that the retrieval process stays focused and is able to proceed past the initial menu pages common with many sites. After these first few layers, the filter can exclude links to the same site, thereby maximizing the breadth of the search at this stage. The user can enter the depth for each part of the web page retrieval filtering process.

Detailed Description Text (30):

Another arrangement that can be used is shown in FIG. 8. In system 116, clients 118, 120, and 122 are interconnected with web servers 124, 126, and 128 via the Internet 130 or an intranet. Web servers 126 and 128 provide web pages of Internet material. Web server 124 contains applets that may be downloaded by clients 118, 120, and 122 when it is desired to use the montage process. The downloaded applets can be combined with standard web browsers to form web browser with montage applet 132 and web browser with montage applet 134. The operation of web server 124 is controlled by montage server process 136 and image server process 138. The group of web images that are displayed on the clients by montage applets 132 and 134 may be obtained from image cache 140 or may be based on a search, a list of URLs, or a bookmarks file specified by the user.

Detailed Description Text (38):

If the user selects the option "search" at step 152, the user is given an opportunity to enter search terms and a desired depth value at step 172. The search terms and depth are preferably entered as part of the initialization information provided by the user. Step 174 involves downloading montage applet 134 from web server 124 to client 122. At step 176, a search engine is run by montage server process 136 based on the search terms supplied by the user. The search generates one or more web pages of search results. At step 178, montage server process 136 extracts a list of URLs from the search results web pages generated at step 176. If desired, a filter may be used at step 178 to ensure that the extracted URLs only correspond to sites other than the site of the search engine. Such a filter excludes links to commercial entities associated with the search engine service.

Detailed Description Text (45):

With the system of FIGS. 8 and 9, images are drawn into image cache 140 whenever a user at a client uses montage server process 136 to initiate a search or enter URLs to define a group of web pages. To make this type of arrangement captivating for users, web servers such as web server 124 may be dedicated to particular subjects. With such an arrangement, the users who view images from the image cache of a given server will be able to quickly view images that are primarily associated with the subject matter of that server.

Detailed Description Text (48):

If desired, the images supported by the montage system can be moving images, such as digital video files or digital animation files. The display of the images can be initiated by the user or may be invoked automatically. For example, images from an image cache or based on a default search or URL list could be displayed in place of a screen saver. When a certain amount of time (e.g., 5 minutes) has elapsed without any input from the user, the images are placed on the display.

Other Reference Publication (2):

Takaha, Hiroki et al. "The Open Image Retrieval System 'Girls' on the World Wide Web" a Translation of Tech. Report of the Institute of Electronics Information, and Communication Engineers (Japan) v. IE95-76, pp. 1-15, Nov. 1998.

Other Reference Publication (3):

International Buisness Machines, Inc. Technical Disclosure Bulletin, vol. 37, No. 4A, "Contextual Search for Multimedia Presentation", pp. 139-141, Apr. 1994.